CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

January 26, 2018

Jamie Ward, Manager
Rivernook Campground
P.O. Box 8
Kernville, CA 93238

RE: Total Coliform MCL Failures for August & September 2017 - Rivernook Campground Water System - Water System No. 1500481 - Citation No. 03_19_18C_010

Dear Ms. Ward,

The State Water Resources Control Board (hereinafter State Board), Division of Drinking Water has issued Citation No. 03_19_18C_010, for failure to comply with the provisions of the California Health & Safety Code and Title 22, California Code of Regulations. Specifically, the Rivernook Campground Water System (hereinafter "Water System") failed the total coliform maximum contaminant level (MCL) for August and September 2017.

The California Safe Drinking Water Act, Section 116577, provides for the State Board to be reimbursed by the public water system for costs incurred for preparing and issuing an enforcement action to that system. Therefore, the Water System has been billed for the preparation and issuance of this citation. The State Board's current billing rate for enforcement activities is $167 per hour. The hourly rate is subject to review and change upon approval. You will receive a bill for these costs following the end of the State's fiscal year, from our Fee Billing Unit in Sacramento.

Any person who is aggrieved by a citation, order or decision issued by the Deputy Director of the Division of Drinking Water under Article 8 (commencing with Health and Safety Code, Section 116625) or Article 9 (commencing with Health and Safety Code, Section 116650), of the Safe Drinking Water Act (Chapter 4, Part 12, Division 104, of the Health and Safety Code) August file a petition with the State Water Board for reconsideration of the citation, order or decision. Appendix 1 to the enclosed Citation contains the relevant statutory provisions for filing a petition for reconsideration (Health and Safety Code, Section 116701).

Petitions must be received by the State Board within 30 days of the issuance of the citation, order or decision by the Deputy Director. The date of issuance is the date when the Division of Drinking Water mails a copy of the citation, order or decision. If the 30th day falls on a Saturday, Sunday, or state holiday, the petition is due the following business day. Petitions must be received by 5:00 p.m.

Information regarding filing petitions August be found at:

http://www.waterboards.ca.gov/drinking_water/programs/petitions/index.shtml

If you have any questions regarding this matter, please contact our office at (661) 335-7315.

Sincerely,

Jaswinder Dhaliwal

Jaswinder S. Dhaliwal, P.E.
Senior Sanitary Engineer
DRINKING WATER FIELD OPERATIONS BRANCH

Enclosure: Citation No. 03_19_18C_010

Certified Mail No. 7015 1520 0000 4433 1662

Cc: Kern County Dept. of Public Health, Environmental Health Division
Daniel Sackett, skOO'kum h20 monitoring, inc. (via email)

Citation No. 03_19_18C_010

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

DIVISION OF DRINKING WATER

Name of Public Water System: Rivernook Campground Water System

Water System No: 1500481

Attention: Jamie Ward, Manager
Rivernook Campground
P.O. Box 8
Kernville, CA 93238

Issued: January 26, 2018

CITATION FOR NONCOMPLIANCE

TOTAL COLIFORM MAXIMUM CONTAMINANT LEVEL VIOLATION

CALIFORNIA CODE OF REGULATIONS, TITLE 22, SECTION 64426.1

AUGUST & SEPTEMBER 2017

The California Health and Safety Code (hereinafter "CHSC"), Section 116650 authorizes the State Water Resources Control Board (hereinafter "State Board") to issue a citation to a public water system when the State Board determines that the public water system has violated or is violating the California Safe Drinking Water Act (hereinafter "California SDWA"), (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit, or order issued or adopted thereunder.

The State Board, acting by and through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for the Division, hereby issues this citation pursuant to Section 116650 of the CHSC to the Rivernook Campground Water System (hereinafter "Water System") for violation of CHSC, Section 116555(a)(1) and California Code of Regulations (hereinafter "CCR"), Title 22, Section 64426.1.

A copy of the applicable statutes and regulations are included in **Appendix 1**, which is attached hereto and incorporated by reference.

STATEMENT OF FACTS

The Water System is classified as a community water system with a population of 535 (70 residential, 9 employees, and 456 visitors-transient population), serving 290 connections. The Division received laboratory results for one (1) routine bacteriological sample, collected on August 1, 2017, which tested positive for total coliform bacteria. Three (3) repeat bacteriological samples were collected on August 3, 2017, from the distribution system; two (2) of these samples tested positive for total coliform bacteria. In addition, two (2) repeat bacteriological samples (also counted towards the Ground Water Rule's triggered source sampling requirement), were collected on August 3, 2017, from Wells 04 and 05; the sample collected from Well 04 tested positive for total coliform bacteria and the sample collected from Well 05 tested negative for total coliform bacteria. To help clear contamination from Well 04 and the distribution system, the Water System provided emergency disinfection and flushing of Well 04 and the distribution system and collected five (5) special bacteriological samples from the distribution system on August 9, 2017; all five (5) samples tested negative for total coliform bacteria.

None of the total coliform positive samples from August 2017, showed the presence of fecal coliform OR *Escherichia coli (E. coli)* bacteria.

The Water System submitted copies of the Tier 2 public notification and proof of public notification documents, to the State Board, on September 1, 2017, for the total coliform maximum contaminant level (MCL) violation in August 2017. The Water System also submitted the Level 1 Assessment (completed by Dan Sackett from skOO'kum h20 monitoring, inc.) to the State Board on August 25, 2017, for the violation in August 2017. According to the Level 1 assessment, a possible cause of contamination could be inadequate disinfection and flushing of Well 04 after replacement of submersible pump in the well in July 2017. Emergency disinfection and flushing was provided in August 2017 to help clear the contamination from the well and the distribution system.

The Division received laboratory results for five (5) routine bacteriological samples collected on September 12, 2017; two (2) of these samples tested positive for total coliform bacteria. One (1) repeat bacteriological sample (also counted towards the Ground Water Rule's triggered source sampling requirement), collected on September 15, 2017, from Well 04, also tested positive for total coliform bacteria. After providing emergency disinfection and flushing of Well 04 and the distribution system, the Water System collected one (1) sample from Well 04 on September 27, 2017, and the result was negative for total coliform bacteria. None of the total coliform positive samples from September 2017, showed the presence of fecal coliform OR *Escherichia coli (E. coli)* bacteria.

The Water System submitted copies of the Tier 2 public notification and proof of public notification documents, to the State Board, on October 11, 2017, for the total coliform MCL violation in September 2017.

Due to the second total coliform treatment technique trigger within 12 months, the Water System was required to have a Level 2 Assessment completed to comply with the federal revised total coliform rule (***see* Appendix 3**). On September 26, 2017, AbdelRahman Shurbaji, Ph.D., P.E., Associate Sanitary Engineer with the Division, conducted a site inspection to help complete the Level 2 Assessment. The findings of the Level 2 Assessment were sent to the Water System, by a letter dated October 11, 2017. Submersible pumps in Wells 04 and 05 were replaced in July and August 2017, respectively. According to the Level 2 Assessment, bacteriological contamination in the distribution system may have originated at Well 04 due to inadequate disinfection and flushing of the well after completion of the repairs. The Water System was directed to provide proper disinfection after completing any repair work on the wells. The Water System was also directed to conduct monthly bacteriological monitoring of Well 04 for the next three months and report the results in MPN/100 mL. It is noted that the Water System has failed to conduct monthly bacteriological sampling of Well 04. If the Water System continues to experience bacteriological quality problems and not able to identify and fix the source of contamination, the State Board may require installation of continuous chlorination treatment.

Five (5) routine samples were collected on October 3, 2017, from the distribution system, and all five (5) samples tested negative for total coliform bacteria. All monthly routine samples collected during the months of

November and December 2017, tested negative for total coliform bacteria. A summary of the bacteriological results from January 2017 to December 2017 is provided in **Appendix 2**.

DETERMINATION

CCR, Title 22, Section 64426.1, Total Coliform MCL states that a public water system collects fewer than 40 bacteriological samples per month is in violation of the total coliform MCL if more than one sample collected during any month is total coliform-positive.

The Water System took fewer than 40 bacteriological samples during August and September 2017. During August 2017, one (1) routine sample and three (3) repeat samples tested positive for total coliform bacteria. Therefore, the State Board has determined that the Water System violated CCR, Title 22, Section 64426.1 during August 2017.

During September 2017, two (2) routine samples and one (1) repeat sample tested positive for total coliform bacteria. Therefore, the State Board has determined that the Water System violated CCR, Title 22, Section 64426.1 during September 2017.

CCR, Title 22, Section 64583 states that a public water system shall provide disinfection of a repaired well, in accordance with the American Water Works Association (AWWA) Standard C652-02. The Water System failed to comply with this requirement when new submersible pumps were installed in Well 04 and Well 05 in July and August 2017, respectively.

DIRECTIVES

The Water System is hereby directed to take the following actions:

1. Comply with CCR, Title 22, Section 64426.1, in all future monitoring periods.
2. The Water System shall conduct monthly bacteriological monitoring of Well 04 for next three months, starting with the month of February 2018, and report the results in MPN/100 mL. The Water System failed to comply with this directive from the Level 2 Assessment dated October 11, 2017.
3. In the future, the Water System shall provide proper disinfection and bacteriological sampling of the wells in accordance with the applicable American Water Works Association (AWWA) Standard C652-02, after making any repairs to the wells. The Water System shall also notify the State Board and its certified distribution operator before and after making repairs to the wells.

All submittals required by this Citation shall be electronically submitted to the Division at the following address: dwpdist19@waterboards.ca.gov and the subject line for all electronic submittals corresponding to this citation shall include the following information: Water System name and number, citation number and title of the document being submitted. Submittals August also be sent to the following mailing address:

Jaswinder S. Dhaliwal, P.E.
Senior Sanitary Engineer
dwpdist19@waterboards.ca.gov

The State Board reserves the right to make such modifications to this Citation as it August deem necessary to protect public health and safety.

Such modifications August be issued as amendments to this Citation and shall be effective upon issuance.

Nothing in this Citation relieves the Water System of its obligation to meet the requirements of the California SDWA (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit or order issued or adopted thereunder.

PARTIES BOUND

This Citation shall apply to and be binding upon the Water System, its owners, shareholders, officers, directors, agents, employees, contractors, successors, and assignees.

SEVERABILITY

The directives of this Citation are severable, and the Water System shall comply with each and every provision thereof notwithstanding the effectiveness of any provision.

FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the State Board to: issue a citation or order with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any regulation, permit, standard, citation, or order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a citation or compliance order. The California SDWA also authorizes the State Board to take action to suspend or revoke a permit that has been issued to a public water system if the public water system has violated applicable law or regulations or has failed to comply with an order of the

State Board, and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an order of the State Board. The State Board does not waive any further enforcement action by issuance of this Citation.

Jaswinder Dhaliwal — Jan. 26, 2018

Jaswinder S. Dhaliwal, P.E. — Date
Senior Sanitary Engineer
DRINKING WATER FIELD OPERATIONS BRANCH

Appendices (3):

1. Applicable Statutes and Regulations
2. Summary of Bacteriological Sampling Results from January 2017 to December 2017
3. Level 2 Assessment- Issued October 11, 2017

Certified Mail No. 7015 1520 0000 4433 1662

CC: Kern County Dept. of Public Health, Env. Health Division (w/o appendices)
Daniel Sackett, skOO'kum h20 monitoring, inc. (via email)

JSD/jsd

APPENDIX 1. APPLICABLE STATUTES AND REGULATIONS FOR CITATION NO. 03_19_18C_010

NOTE: The following language is provided for the convenience of the recipient, and cannot be relied upon as the State of California's representation of the law. The published codes are the only official representation of the law. Regulations related to drinking water are in Titles 22 and 17 of the California Code of Regulations. Statutes related to drinking water are in the Health & Safety Code, the Water Code, and other codes.

California Health and Safety Code (CHSC):

Section 116271 states in relevant part:
(a) The State Water Resources Control Board succeeds to and is vested with all of the authority, duties, powers, purposes, functions, responsibilities, and jurisdiction of the State Department of Public Health, its predecessors, and its director for purposes of all of the following:

(1) The Environmental Laboratory Accreditation Act (Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101).
(2) Article 3 (commencing with Section 106875) of Chapter 4 of Part 1.
(3) Article 1 (commencing with Section 115825) of Chapter 5 of Part 10.
(4) This chapter and the Safe Drinking Water State Revolving Fund Law of 1997 (Chapter 4.5 (commencing with Section 116760)).
(5) Article 2 (commencing with Section 116800), Article 3 (commencing with Section 116825), and Article 4 (commencing with Section 116875) of Chapter 5.
(6) Chapter 7 (commencing with Section 116975).
(7) The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Division 43 (commencing with Section 75001) of the Public Resources Code).
(8) The Water Recycling Law (Chapter 7 (commencing with Section 13500) of Division 7 of the Water Code).
(9) Chapter 7.3 (commencing with Section 13560) of Division 7 of the Water Code.
(10) The California Safe Drinking Water Bond Law of 1976 (Chapter 10.5 (commencing with Section 13850) of Division 7 of the Water Code).
(11) Wholesale Regional Water System Security and Reliability Act (Division 20.5 (commencing with Section 73500) of the Water Code).
(12) Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Division 26.5 (commencing with Section 79500) of the Water Code).

(b) The State Water Resources Control Board shall maintain a drinking water program and carry out the duties, responsibilities, and functions described in this section. Statutory reference to "department," "state department," or "director" regarding a function transferred to the State Water Resources Control Board shall refer to the State Water Resources Control Board. This section does not impair the authority of a local health officer to enforce this chapter or a county's election not to enforce this chapter, as provided in Section 116500...

(k) (1) The State Water Resources Control Board shall appoint a deputy director who reports to the executive director to oversee the issuance and enforcement of public water system permits and other duties as appropriate. The deputy director shall have public health expertise.
(2) The deputy director is delegated the State Water Resources Control Board's authority to provide notice, approve notice content, approve emergency notification plans, and take other action pursuant to Article 5 (commencing with Section 116450), to issue, renew, reissue, revise, amend, or deny any public water system permits pursuant to Article 7 (commencing with Section 116525), to suspend or revoke any public water system permit pursuant to Article 8 (commencing with Section 116625), and to issue citations, assess penalties, or issue orders pursuant to Article 9 (commencing with Section 116650). Decisions and actions of the deputy director taken pursuant to Article 5 (commencing with Section 116450) or Article 7 (commencing with Section 116525) are deemed decisions and actions taken, but are not subject to reconsideration, by the State Water Resources Control Board. Decisions and actions of the deputy director taken pursuant to Article 8 (commencing with Section 116625) and Article 9 (commencing with Section 116650) are deemed decisions and actions taken by the State Water Resources Control Board, but any aggrieved person August petition the State Water Resources Control Board for reconsideration of the decision or action. This subdivision is not a limitation on the State Water Resources Control Board's authority to delegate any other powers and duties.

Section 116555 states in relevant part:
(a) Any person who owns a public water system shall ensure that the system does all of the following:

(1) Complies with primary and secondary drinking water standards.
(2) Will not be subject to backflow under normal operating conditions.
(3) Provides a reliable and adequate supply of pure, wholesome, healthful, and potable water.

Section 116650 states in relevant part:
(a) If the state board determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the state board August issue a citation to the public water system. The citation shall be served

upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
(b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
(c) A citation August specify a date for elimination or correction of the condition constituting the violation.
(d) A citation August include the assessment of a penalty as specified in subdivision (e).
(e) The state board August assess a penalty in an amount not to exceed one thousand dollars ($1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty August be assessed for each violation and shall be in addition to any liability or penalty imposed under any other law.

California Code of Regulations, Title 22 (CCR):

Section 64421 (General Requirements) states:
(a) Each water supplier shall:
(1) Develop a routine sample siting plan as required in section 64422;
(2) Collect routine, repeat and replacement samples as required in Sections 64423, 64424, and 64425;
(3) Have all samples analyzed by laboratories approved to perform those analyses by the State Board and report results as required in section 64423.1;
(4) Notify the State Board when there is an increase in coliform bacteria in bacteriological samples as required in section 64426; and
(5) Comply with the Maximum Contaminant Level as required in section 64426.1.
(b) Water suppliers shall perform additional bacteriological monitoring as follows:
(1) After construction or repair of wells;
(2) After main installation or repair;
(3) After construction, repair, or maintenance of storage facilities; and
(4) After any system pressure loss to less than five psi. Samples collected shall represent the water quality in the affected portions of the system.

Section 64422 (Routine Sample Siting Plan) states:
(a) By September 1, 1992, each water supplier shall develop and submit to the State Board a siting plan for the routine collection of samples for total coliform analysis, subject to the following:
(1) The sample sites chosen shall be representative of water throughout the distribution system including all pressure zones, and areas supplied by each water source and distribution reservoir.
(2) The water supplier August rotate sampling among the sample sites if the total number of sites needed to comply with (a)(1) above exceeds the number of samples required according to Table 64423-A. The rotation plan shall be described in the sample siting plan.
(b) If personnel other than certified operators will be performing field tests and/or collecting samples, the sample siting plan shall include a declaration that such personnel have been trained, pursuant to §64415 (b).
(c) The supplier shall submit an updated plan to the State Board at least once every ten years and at any time the plan no longer ensures representative monitoring of the system.

Section 64423 (Routine Sampling) states:
(a) Each water supplier shall collect routine bacteriological water samples as follows:
(1) The minimum number of samples for community water systems shall be based on the known population served or the total number of service connections, whichever results in the greater number of samples, as shown in Table 64423-A. A community water system using groundwater which serves 25-1000 persons August request from the State Board a reduction in monitoring frequency. The minimum reduced frequency shall not be less than one sample per quarter.
(2) The minimum number of samples for nontransient-noncommunity water systems shall be based on the known population served as shown in Table 64423-A during those months when the system is operating. A nontransient-noncommunity water system using groundwater which serves 25-1000 persons August request from the State Board a reduction in monitoring frequency if it has not violated the requirements in this article during the past twelve months. The minimum reduced frequency shall not be less than one sample per quarter.
(3) The minimum number of samples for transient-noncommunity water systems using groundwater and serving 1000 or fewer persons a month shall be one in each calendar quarter during which the system provides water to the public.
(4) The minimum number of samples for transient-noncommunity water systems using groundwater and serving more than 1000 persons during any month shall be based on the known population served as shown in Table 64423-A, except that the water supplier August request from the State Board a reduction in monitoring for any month the system serves 1000 persons or fewer. The minimum reduced frequency shall not be less than one sample in each calendar quarter during which the system provides water to the public.
(5) The minimum number of samples for transient-noncommunity water systems using approved surface water shall be based on the population served as shown in Table 64423-A. A system using groundwater under the direct influence of surface water shall begin monitoring at this frequency by the end of the sixth month after the State Board has designated the source to be approved surface water.

(6) A public water system shall collect samples at regular time intervals throughout the month, except that a system using groundwater which serves 4,900 persons or fewer August collect all required samples on a single day if they are taken from different sites.

(b) In addition to the minimum sampling requirements, all water suppliers using approved surface water which do not practice treatment in compliance with Sections 64650 through 64666, shall collect a minimum of one sample before or at the first service connection each day during which the turbidity level of the water delivered to the system exceeds 1 NTU. The sample shall be collected within 24 hours of the exceedance and shall be analyzed for total coliforms. If the water supplier is unable to collect and/or analyze the sample within the 24-hour time period because of extenuating circumstances beyond its control, the supplier shall notify the State Board within the 24-hour time period and August request an extension. Sample results shall be included in determining compliance with the MCL for total coliforms in Section 64426.1.

(c) If any routine, repeat, or replacement sample is total coliform-positive, then the water supplier shall collect repeat samples in accordance with Section 64424 and comply with the reporting requirements specified in Sections 64426 and 64426.1.

Table 64423-A

Minimum Number of Routine Total Coliform Samples

Monthly Population Served	Service Connections	Minimum Number of Samples
25 to 1000	15 to 400	1 per month
1,001 to 2,500	401 to 890	2 per month
2,501 to 3,300	891 to 1,180	3 per month
3,301 to 4,100	1,181 to 1,460	4 per month
4,101 to 4,900	1,461 to 1,750	5 per month
4,901 to 5,800	1,751 to 2,100	6 per month
5,801 to 6,700	2,101 to 2,400	7 per month
6,701 to 7,600	2,401 to 2,700	2 per week
7,601 to 12,900	2,701 to 4,600	3 per week
12,901 to 17,200	4,601 to 6,100	4 per week
17,201 to 21,500	6,101 to 7,700	5 per week
21,501 to 25,000	7,701 to 8,900	6 per week
25,001 to 33,000	8,901 to 11,800	8 per week
33,001 to 41,000	11,801 to 14,600	10 per week
41,001 to 50,000	14,601 to 17,900	12 per week
50,001 to 59,000	17,901 to 21,100	15 per week
59,001 to 70,000	21,101 to 25,000	18 per week
70,001 to 83,000	25,001 to 29,600	20 per week
83,001 to 96,000	29,601 to 34,300	23 per week
96,001 to 130,000	34,301 to 46,400	25 per week
130,001 to 220,000	46,401 to 78,600	30 per week
220,001 to 320,000	78,601 to 114,300	38 per week
320,001 to 450,000	114,301 to 160,700	50 per week
450,001 to 600,000	160,701 to 214,300	55 per week
600,001 to 780,000	214,301 to 278,600	60 per week
780,001 to 970,000	278,601 to 346,400	70 per week
970,001 to 1,230,000	346,401 to 439,300	75 per week
1,230,001 to 1,520,000	439,301 to 542,900	85 per week
1,520,001 to 1,850,000	542,901 to 660,700	90 per week
1,850,001 to 2,270,000	660,701 to 810,700	98 per week
2,270,001 to 3,020,000	810,701 to 1,078,600	105 per week
3,020,001 to 3,960,000	1,078,601 to 1,414,300	110 per week
3,960,001 or more	1,414,301 or more	120 per week

Section 64423.1 (Sample Analysis and Reporting of Results) states:

(a) The water supplier shall designate (label) each sample as routine, repeat, replacement, or "other" pursuant to Section 64421(b), and have each sample analyzed for total coliforms. The supplier also shall require the laboratory to analyze the same sample for fecal coliforms or Escherichia coli (E. coli) whenever the presence of total coliforms is indicated. As a minimum, the analytical results shall be reported in terms of the presence or absence of total or fecal coliforms, or E. coli in the sample, whichever is appropriate.

(b) The water supplier shall require the laboratory to notify the supplier within 24 hours, whenever the presence of total coliforms, fecal coliforms or E. coli is demonstrated in a sample or a sample is invalidated due to interference problems, pursuant to Section 64425(b), and shall ensure that a contact person is available to receive these analytical results 24-hours a day. The water supplier shall also require the laboratory to immediately notify the State Board of any positive bacteriological results if the laboratory cannot make direct contact with the designated contact person within 24 hours.

(c) Analytical results of all required samples collected for a system in a calendar month shall be reported to the State Board not later than the tenth day of the following month, as follows:

(1) The water supplier shall submit a monthly summary of the bacteriological monitoring results to the State Board.

(2) For systems serving fewer than 10,000 service connections or 33,000 persons, the water supplier shall require the laboratory to submit copies of all required bacteriological monitoring results directly to the State Board.
(3) For systems serving more than 10,000 service connections, or 33,000 persons, the water supplier shall require the laboratory to submit copies of bacteriological monitoring results for all positive routine samples and all repeat samples directly to the State Board.

(d) Laboratory reports shall be retained by the water supplier for a period of at least five years and shall be made available to the State Board upon request.

Section 64424 (Repeat Sampling) states in relevant part:

(a) If a routine sample is total coliform-positive, the water supplier shall collect a repeat sample set as described in paragraph (1) within 24 hours of being notified of the positive result. The repeat samples shall all be collected within the same 24 hour time period. A single service connection system August request that the State Board allow the collection of the repeat sample set over a four-day period.

(1) For a water supplier that normally collects more than one routine sample a month, a repeat sample set shall be at least three samples for each total coliform-positive sample. For a water supplier that normally collects one or fewer samples per month, a repeat sample set shall be at least four samples for each total coliform-positive sample.
(2) If the water supplier is unable to collect the samples within the 24-hour time period specified in subsection (a) or deliver the samples to the laboratory within 24 hours after collection because of circumstances beyond its control, the water supplier shall notify the State Board within 24 hours. The State Board will then determine how much time the supplier will have to collect the repeat samples.

(b) When collecting the repeat sample set, the water supplier shall collect at least one repeat sample from the sampling tap where the original total coliform-positive sample was taken. Other repeat samples shall be collected within five service connections upstream or downstream of the original site. At least one sample shall be from upstream and one from downstream unless there is no upstream and/or downstream service connection.

(c) If one or more samples in the repeat sample set is total coliform-positive, the water supplier shall collect and have analyzed an additional set of repeat samples as specified in subsections (a) and (b). The supplier shall repeat this process until either no coliforms are detected in one complete repeat sample set or the supplier determines that the MCL for total coliforms specified in Section 64426.1 has been exceeded and notifies the State Board.

(d) If a public water system for which fewer than five routine samples/month are collected has one or more total coliform-positive samples, the water supplier shall collect at least five routine samples the following month. If the supplier stops supplying water during the month after the total coliform-positive(s), at least five samples shall be collected during the first month the system resumes operation. A water supplier August request the State Board waive the requirement to collect at least five routine samples the following month, but a waiver will not be granted solely on the basis that all repeat samples are total coliform-negative. To request a waiver, one of the following conditions shall be met:

(1) The State Board conducts a site visit before the end of the next month the system provides water to the public to determine whether additional monitoring and/or corrective action is necessary to protect public health.
(2) The State Board determines why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. If a waiver is granted, a system shall collect at least one routine sample before the end of the next month it serves water to the public and use it to determine compliance with Section 64426.1.

Section 64425 (Sample Invalidation) states:

(a) A water supplier August request the Department to invalidate a sample for which a total coliform-positive result has been reported if the supplier demonstrates:

(1) All repeat sample(s) collected at the same tap as the original total coliform-positive sample also are total coliform- positive and all repeat samples collected within five service connections of the original tap are not total coliform-positive; or
(2) The laboratory did not follow the prescribed analytical methods pursuant to §64415(a), based on a review of laboratory documentation by the Department. The supplier shall submit to the Department a written request for invalidation along with the laboratory documentation, the supplier's sample collection records and any observations noted during sample collection and delivery. The water supplier shall require the laboratory to provide the supplier with documentation which shall include, but not be limited to:

(A) A letter from the director of the laboratory having generated the data, confirming the invalidation request by reason of laboratory accident or error;
(B) Complete sample identification, laboratory sample log number (if used), date and time of collection, date and time of receipt by the laboratory, date and time of analysis for the sample(s) in question;
(C) Complete description of the accident or error alleged to have invalidated the result(s);
(D) Copies of all analytical, operating, and quality assurance records pertaining to the incident in question; and
(E) Any observations noted by laboratory personnel when receiving and analyzing the sample(s) in question.

(b) Whenever any total coliform sample result indicative of the absence of total coliforms has been declared invalid by the laboratory due to interference problems as specified at 40 Code Federal Regulations, Section 141.2100(c)(2), the supplier shall collect a replacement sample from the same location as the original sample within 24 hours of being notified of the interference problem, and have it analyzed for the presence of total coliforms. The supplier shall continue to re-sample at the original site within 24 hours and have the samples analyzed until a valid result is obtained.

Section 64426 (Significant Rise in Bacterial Count) states in relevant part:

(a) Any of the following criteria shall indicate a possible significant rise in bacterial count:
(1) A system collecting at least 40 samples per month has a total coliform-positive routine sample followed by two total coliform-positive repeat samples in the repeat sample set;
(2) A system has a sample which is positive for fecal coliform or E. coli; or
(3) A system fails the total coliform Maximum Contaminant Level (MCL) as defined in Section 64426.1.
(b) When the coliform levels specified in subsection (a) are reached or exceeded, the water supplier shall:
(1) Contact the State Board by the end of the day on which the system is notified of the test result or the system determines that it has exceeded the MCL, unless the notification or determination occurs after the State Board office is closed, in which case the supplier shall notify the State Board within 24 hours; and
(2) Submit to the State Board information on the current status of physical works and operating procedures which August have caused the elevated bacteriological findings, or any information on community illness suspected of being waterborne. This shall include, but not be limited to:
(A) Current operating procedures that are or could potentially be related to the increase in bacterial count;
(B) Any interruptions in the treatment process;
(C) System pressure loss to less than 5 psi;
(D) Vandalism and/or unauthorized access to facilities;
(E) Physical evidence indicating bacteriological contamination of facilities;
(F) Analytical results of any additional samples collected, including source samples;
(G) Community illness suspected of being waterborne; and
(H) Records of the investigation and any action taken.

Section 64426.1 (Total Coliform Maximum Contaminant Level (MCL)) states in relevant part:
§64426.1. Total Coliform Maximum Contaminant Level (MCL).
(a) Results of all samples collected in a calendar month pursuant to Sections 64423, 64424, and 64425 that are not invalidated by the State Board or the laboratory shall be included in determining compliance with the total coliform MCL. Special purpose samples such as those listed in section 64421(b) and samples collected by the water supplier during special investigations shall not be used to determine compliance with the total coliform MCL.

(b) A public water system is in violation of the total coliform MCL when any of the following occurs:
(1) For a public water system which collects at least 40 samples per month, more than 5.0 percent of the samples collected during any month are total coliform-positive; or
(2) For a public water system which collects fewer than 40 samples per month, more than one sample collected during any month is total coliform-positive; or
(3) Any repeat sample is fecal coliform-positive or E. coli-positive; or
(4) Any repeat sample following a fecal coliform-positive or E. coli-positive routine sample is total coliform-positive.

(c) If a public water system is not in compliance with paragraphs (b)(1) through (4), during any month in which it supplies water to the public, the water supplier shall notify the State Board by the end of the business day on which this is determined, unless the determination occurs after the State Board office is closed, in which case the supplier shall notify the State Board within 24 hours of the determination. The water supplier shall also notify the consumers served by the water system. A Tier 2 Public Notice shall be given for violations of paragraph (b)(1) or (2), pursuant to section 64463.4. A Tier 1 Public Notice shall be given for violations of paragraph (b)(3) or (4), pursuant to section 64463.1.

Section 64463.1 (Tier 1 Public Notice) states in relevant part:
(a) A water system shall give public notice pursuant to this section and section 64465 if any of the following occurs:
(1) Violation of the total coliform MCL when:
(A) Fecal coliform or E. coli are present in the distribution system; or
(B) When any repeat sample tests positive for coliform and the water system fails to test for fecal coliforms or E. coli in the repeat sample;...
(b) As soon as possible within 24 hours after learning of any of the violations in subsection (a) or being notified by the State Board that it has determined there is a potential for adverse effects on human health [pursuant to paragraph (a)(4), (5), or (6)], the water system shall:
(1) Give public notice pursuant to this section;
(2) Initiate consultation with the State Board within the same timeframe; and
(3) Comply with any additional public notice requirements that are determined by the consultation to be necessary to protect public health.
(c) A water system shall deliver the public notice in a manner designed to reach residential, transient, and nontransient users of the water system and shall use, as a minimum, one of the following forms:
(1) Radio or television;
(2) Posting in conspicuous locations throughout the area served by the water system;
(3) Hand delivery to persons served by the water system; or
(4) Other method approved by the State Board, based on the method's ability to inform water system users.

Section 64463.4 (Tier 2 Public Notice) states:

(a) A water system shall give public notice pursuant to this section if any of the following occurs:

(1) Any violation of the MCL, MRDL, and treatment technique requirements, except:

(A) Where a Tier 1 public notice is required under section 64463.1; or

(B) Where the State Board determines that a Tier 1 public notice is required, based on potential health impacts and persistence of the violations;

(2) All violations of the monitoring and testing procedure requirements in sections 64421 through 64426.1, article 3 (Primary Standards – Bacteriological Quality), for which the State Board determines that a Tier 2 rather than a Tier 3 public notice is required, based on potential health impacts and persistence of the violations;

(3) Other violations of the monitoring and testing procedure requirements in this chapter, and chapters 15.5, 17 and 17.5, for which the State Board determines that a Tier 2 rather than a Tier 3 public notice is required, based on potential health impacts and persistence of the violations; or

(4) Failure to comply with the terms and conditions of any variance or exemption in place.

(b) A water system shall give the notice as soon as possible within 30 days after it learns of a violation or occurrence specified in subsection (a), except that the water system August request an extension of up to 60 days for providing the notice. This extension would be subject to the State Board's written approval based on the violation or occurrence having been resolved and the State Board's determination that public health and welfare would in no way be adversely affected. In addition, the water system shall:

(1) Maintain posted notices in place for as long as the violation or occurrence continues, but in no case less than seven days;

(2) Repeat the notice every three months as long as the violation or occurrence continues. Subject to the State Board's written approval based on its determination that public health would in no way be adversely affected, the water system August be allowed to notice less frequently but in no case less than once per year. No allowance for reduced frequency of notice shall be given in the case of a total coliform MCL violation or violation of a Chapter 17 treatment technique requirement; and

(3) For turbidity violations pursuant to sections 64652.5(c)(2) and 64653(c), (d) and (f), as applicable, a water system shall consult with the State Board as soon as possible within 24 hours after the water system learns of the violation to determine whether a Tier 1 public notice is required. If consultation does not take place within 24 hours, the water system shall give Tier 1 public notice within 48 hours after learning of the violation.

(c) A water system shall deliver the notice, in a manner designed to reach persons served, within the required time period as follows:

(1) Unless otherwise directed by the State Board in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, community water systems shall give public notice by;

(A) Mail or direct delivery to each customer receiving a bill including those that provide their drinking water to others (e.g., schools or school systems, apartment building owners, or large private employers), and other service connections to which water is delivered by the water system; and

(B) Use of one or more of the following methods to reach persons not likely to be reached by a mailing or direct delivery (renters, university students, nursing home patients, prison inmates, etc.):

1. Publication in a local newspaper;
2. Posting in conspicuous public places served by the water system, or on the Internet; or
3. Delivery to community organizations.

(2) Unless otherwise directed by the State Board in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, noncommunity water systems shall give the public notice by:

(A) Posting in conspicuous locations throughout the area served by the water system; and

(B) Using one or more of the following methods to reach persons not likely to be reached by a public posting:

1. Publication in a local newspaper or newsletter distributed to customers;
2. E-mail message to employees or students;
3. Posting on the Internet or intranet; or
4. Direct delivery to each customer.

Section 64465 (Public Notice Content and Format) states in relevant part:

(a) Each public notice given pursuant to this article, except Tier 3 public notices for variances and exemptions pursuant to subsection (b), shall contain the following:

(1) A description of the violation or occurrence, including the contaminant(s) of concern, and (as applicable) the contaminant level(s);

(2) The date(s) of the violation or occurrence;

(3) Any potential adverse health effects from the violation or occurrence, including the appropriate standard health effects language from appendices 64465-A through G;

(4) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in drinking water;

(5) Whether alternative water supplies should be used;

(6) What actions consumers should take, including when they should seek medical help, if known;

(7) What the water system is doing to correct the violation or occurrence;

(8) When the water system expects to return to compliance or resolve the occurrence;

(9) The name, business address, and phone number of the water system owner, operator, or designee of the water system as a source of additional information concerning the public notice;

(10) A statement to encourage the public notice recipient to distribute the public notice to other persons served, using the following standard language: —Please share this information with all the other people who drink this water, especially those who August not have received this public notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail; and

(11) For a water system with a monitoring and testing procedure violation, this language shall be included: "We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During [compliance period dates], we ['did not monitor or test' or 'did not complete all monitoring or testing'] for [contaminant(s)], and therefore, cannot be sure of the quality of your drinking water during that time." ...

(c) A public water system providing notice pursuant to this article shall comply with the following multilingual-related requirements:

(2) For a Tier 2 or Tier 3 public notice:

(A) The notice shall contain information in Spanish regarding the importance of the notice, or contain a telephone number or address where Spanish-speaking residents August contact the public water system to obtain a translated copy of the notice or assistance in Spanish; and

(B) When a non-English speaking group other than Spanish-speaking exceeds 1,000 residents or 10 percent of the residents served by the public water system, the notice shall include:

1. Information in the appropriate language(s) regarding the importance of the notice; or
2. A telephone number or address where such residents August contact the public water system to obtain a translated copy of the notice or assistance in the appropriate language; and

(3) For a public water system subject to the Dymally-Alatorre Bilingual Services Act, Chapter 17.5, Division 7, of the Government Code (commencing with section 7290), meeting the requirements of this Article August not ensure compliance with the Dymally-Alatorre Bilingual Services Act.

(d) Each public notice given pursuant to this article shall:

(1) Be displayed such that it catches people's attention when printed or posted and be formatted in such a way that the message in the public notice can be understood at the eighth-grade level;

(2) Not contain technical language beyond an eighth-grade level or print smaller than 12 point; and

(3) Not contain language that minimizes or contradicts the information being given in the public notice.

Appendix 64465-A. Health Effects Language - Microbiological Contaminants.

Contaminant	Health Effects Language
Total Coliform	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria August be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Fecal coliform/E. coli	Fecal coliforms and E. coli are bacteria whose presence indicates that the water August be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They August pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.
Turbidity	Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity August indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Section 64469 (Reporting Requirements) states in relevant part:

(d) Within 10 days of giving initial or repeat public notice pursuant to Article 18 of this Chapter, except for notice given under section 64463.7(d), each water system shall submit a certification to the State Board that it has done so, along with a representative copy of each type of public notice given.

Section 64481 (Content of the Consumer Confidence Report) states in relevant part:

(g) For the year covered by the report, the Consumer Confidence Report shall note any violations of paragraphs (1) through (7) and give related information, including any potential adverse health effects, and the steps the system has taken to correct the violation.

(1) Monitoring and reporting of compliance data.

Section 64583 (Disinfection of Wells) states in relevant part:

A new or repaired well, or a well that has not been in operation for more than three months shall be sampled for bacteriological quality prior to use. If the results of the bacteriological sampling are positive for coliform bacteria, the well shall be disinfected in accordance with the American Water Works Association C654-03, which is hereby incorporated by reference, and resampled for bacteriological quality and the test results shall be submitted to the State Board for review and approval before the well is placed into service.

APPENDIX 2. SUMMARY OF BACTERIOLOGICAL RESULTS FROM JAN. 2017 TO DEC. 2017
FOR
CITATION NO. 03_19_18C_010

Rivernook Campground

1500481 *Distribution System Freq: 1/M*

Sample Date	*Time*	*Location*	*T Coli*	*E Coli*	*F Coli*	*Type*	*Cl2*	*Violation*	*Comment*
1/10/2017	15:43	1ROU	P	A		Routine			
1/13/2017	9:15	1ROU	A	A		Repeat			
1/13/2017	9:20	1REP1	A	A		Repeat			
1/13/2017	9:45	1REP2	A	A		Repeat			
2/1/2017	13:26	1ROU	A	A		Routine			
2/1/2017	13:35	5ROU	A	A		Routine			
2/1/2017	13:47	4ROU	A	A		Routine			
2/1/2017	13:56	3ROU	A	A		Routine			
2/1/2017	14:04	2ROU	A	A		Routine			
3/1/2017	12:57	3ROU	A	A		Routine			
4/4/2017	12:32	4ROU	A	A		Routine			
5/2/2017	13:24	5ROU	A	A		Routine			
6/7/2017	9:18	1ROU	A	A		Routine			
7/11/2017	11:26	2ROU	A	A		Routine			
8/1/2017	14:43	3ROU	P	A		Routine			
8/3/2017	18:25	3ROU	P	A		Repeat			MCL. Cit. #03_19_18C_010 issued. Level 1 Assessment completed on 8/25/17.
8/3/2017	18:29	3REP1	P	A		Repeat			
8/3/2017	18:39	3REP2	A	A		Repeat			
8/9/2017	8:36	2ROU	A	A		Other			
8/9/2017	8:46	4ROU	A	A		Other			
8/9/2017	8:54	3ROU	A	A		Other			
8/9/2017	9:03	1ROU	A	A		Other			
8/9/2017	9:16	5ROU	A	A		Other			
9/12/2017	13:31	1ROU	A	A		Routine			
9/12/2017	13:40	2ROU	A	A		Routine			
9/12/2017	13:48	5ROU	A	A		Routine			
9/12/2017	13:56	3ROU	P	A		Routine			
9/12/2017	14:03	4ROU	P	A		Routine			MCL. Cit. #03_19_18C_010 issued. Level 2 Assessment completed on 10/11/17.
10/3/2017	12:06	1ROU	A	A		Routine			
10/3/2017	12:13	3ROU	A	A		Routine			
10/3/2017	12:17	4ROU	A	A		Routine			
10/3/2017	12:24	2ROU	A	A		Routine			

Sample Date	*Time*	*Location*	*T Coli*	*E Coli*	*F Coli*	*Type*	*Cl2*	*Violation*	*Comment*
10/3/2017	12:31	5ROU	A	A		Routine			
11/7/2017	11:50	1ROU	A	A		Routine			
12/12/2017	12:48	2ROU	A	A		Routine			

Rivernook Campground

1500481 *Source Monitoring Freq:*

Sample Date	*Time*	*Source*	*T Coli*	*E Coli*	*F Coli*	*Violation*	*Comment*
1/13/2017	9:30	WELL 04	A	A			
7/5/2017	13:59	WELL 03	P	A			
7/25/2017	14:14	WELL 03	A	A			
8/3/2017	18:01	WELL 04	14	<1			GWR & Repeat Sample
8/3/2017	18:10	WELL 05	<1	<1			GWR & Repeat Sample
9/15/2017	8:11	WELL 04	18	<1			GWR & Repeat Sample
9/27/2017	9:15	WELL 04	<1	<1			Conduct monthly sampling of Well 04 for next three months per directive in Level 2 Assessment.

APPENDIX 3. LEVEL 2 ASSESSMENT – ISSUED OCTOBER 11, 2017
FOR
CITATION NO. 03_19_18C_010

CALIFORNIA
Water Boards

Edmund G. Brown Jr.
GOVERNOR

Matthew Rodriquez
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

October 11, 2017

Jamie Ward, Manager
Rivernook Campground
P.O Box 8
Kernville, CA 93238

FIELD INSPECTION/LEVEL 2 ASSESSMENT OF RIVERNOOK CAMPGROUND'S WATER SUPPLY SYSTEM TO INVESTIGATE BACTERIOLOGICAL CONTAMINATION, WATER SYSTEM NO. 1500481

Dear Ms. Ward,

The Division of Drinking Water, State Water Resources Control Board (State Board) regulates the domestic water supply system (Water System) of the Rivernook Campground. On September 26, 2017, AbdelRahman Shurbaji (Ph.D., P.E.), an engineer with the State Board, conducted an inspection of the facilities making up the Water System with your help and in the presence of Mrs. Amanda Pascoe (Owner) and Mr. Shawn Ward (Maintenance Man). Shon Sackett from skOO'kum h20 monitoring, inc. (contract sampler and certified distribution operator) was also present during the inspection. The inspection was conducted to complete an investigation (Level 2 Assessment) of the cause of the bacteriological contamination in the distribution system, as shown by coliform positive samples on August 1, 2017 (one routine total coliform positive sample), August 3, 2017 (three out of five repeat total coliform positive samples), and September 12, 2017 (three out of five routine total coliform positive samples. None of the samples tested positive for *E.coli* bacteria. Due to having a second total coliform treatment technique within a period of 12 months, a Level 2 Assessment is required to comply with the federal revised Total Coliform Rule (rTCR). The main purpose of the Level 2 Assessment is to help identify a possible cause of the coliform contamination, and find any needed corrective actions, as detailed in the completed form titled "Revised Total Coliform Rule - Level 2 Assessment" (**enclosed**), and discussed in this letter. All the above-mentioned samples were collected in accordance with an approved Bacteriological Sample Siting Plan, dated April 21, 2015. Based on the information provided to the State Board, distribution/treatment licensed operators from skOO'kum h20 monitoring, inc. provided emergency chlorination at the well(s) and flushed the distribution system to help clear the bacteriological contamination during the months of August and September 2017.

Mr. Ward stated that the submersible pumps in Well 4 and Well 5 were replaced in July and August 2017, respectively. It was further reported that the contractor who did the repairs, did not disinfect and flush the wells, after completion of the work. Thus, the Water System failed to comply with Section 64583 of the California Waterworks Standards, which requires disinfection of the wells after completion of repairs, and before placing the wells back in service. Since Well 04 was found to be contaminated with coliform bacteria per sampling conducted on August 3, September 14 and September 20, 2017. It is likely that coliform bacteria was introduced into

the well casing during the repairs. After disinfecting Well 04 again, another sample was collected on September 27, 2017, from the well and the result was negative for total coliform bacteria. It is important to note that disinfecting the well(s) is the first step to eliminate the bacteriological contamination at its source and prevent spreading of contamination in the distribution system. Continuous chlorination is not being provided at the wellhead at this time. If Well 04 continues to show total coliform positive samples and efforts to clean up the well are not successful, the State Board will direct the Water System to install mandatory continuous chlorination treatment.

Based on the September 26, 2017 field inspection, review of the bacteriological sampling results, and review of the Water System's operation, the State Board has identified the following items that needs to be addressed by the Water System:

1. In the future before making any repairs to the well(s), the Water System shall notify its certified distribution operator. After completing the repairs, the Water System shall provide disinfection, flushing and bacteriological sampling of the well(s) in accordance with the applicable American Water Works Association (AWWA) Standard, and under the supervision of a licensed operator. The Water System shall also notify the State Board when any system well(s) is removed from service to make repairs.

2. For the next three months (October, November and December 2017), the Water System shall collect a bacteriological sample, each month, from Well 04 and have the results reported in MPN/100 mL. The Water System shall notify the State Board when any sample from the well is positive for total coliform bacteria.

3. When needed, emergency chlorination treatment shall be provided after contacting the State Board and certified distribution operator, in accordance with an approved emergency chlorination plan.

Within 30 days, please submit a written response to the State Board, addressing the above-mentioned items and explaining the actions you have taken or plans to take. We appreciate the assistance provided during the inspection visit and completion of Level 2 assessment. If you have any questions regarding this letter, please contact our office at (661) 335-7315 or via email at DWPDIST19@waterboards.ca.gov.

Sincerely,

Jaswinder Dhaliwal

Jaswinder S. Dhaliwal, P.E.
Senior Sanitary Engineer
Division of Drinking Water

Enclosure: Level 2 Assessment Form

cc: Kern County Department of Public Health, Environmental Health Division (w/o enclosure)
Dan Sackett,, skOO'kum h20 monitoring, inc. (contract sampler & certified operator)
Shon Sackett, skOO'kum h20 monitoring, inc. (via email)

JSD:ams

Enclosure

Level 2 Assessment Form

REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 2 ASSESSMENT

This form is intended to assist Division of Drinking Water (DDW) or Local Primacy Agency (LPA) Staff in completing the investigation required by the federal revised Total Coliform Rule (rTCR) [effective April 1, 2016]. If the answer has a large box around it, it is an issue and needs to be described by LPA or DDW in the next column. Please include the question number in the description. The PWS must address each issue described in the Corrective Action column. **To avoid a violation, the water system must submit to DDW/LPA a completed assessment report no later than 30 days after the trigger date.**

PWS ID#:1500481 PWS Name: Rivernook Campgrounds Circle one: CWS / NTNC / TNC

Operator in Responsible Charge (print name): Shon Sackett (T2/D2 Operator), Shawn Ward (Campground Maintenance) and Jamie Ward, Manager, Phone:760-376-2705

Assessment trigger date: September 12, 2017 Date Assessment Completed: September 26, 2017

SEASONAL: YES ☐ NO ☒ Reason for Assessment: Second coliform MCL in 12 months (August and September 2017)

Person who collected TC positive samples: Shon Sackett Contact info for person who collected samples: 661-823-7894

Name of Certified Lab conducting sample analysis: BC laboratories

Assessment Elements	Y	N	N/A	Issue Description	Corrective Action Taken or Planned to be Taken and Date
1. Review of the sample sites	**Y**	**N**	**N/A**	**Indicate Element number being described.**	**Indicate Element number being described.**
1.1 Was the sample taken at the routine coliform site? List the name(s) of the positive sample site(s).	☒	☐	☐	1.1. One routine sample taken on Aug 1, 2017 tested positive for total coliform. Collected 4 repeat samples on Aug 3 of which two (2) samples tested total coliform positive. Collected five (5) routine samples on September 12 of which 3 samples came positive for total coliform. A sample from Well 4 taken on September 14 tested positive, opening an eye on the well(s). The same well tested positive on Aug 3, 2017. 1.10. Wells 4 and 5 have undergone repairs in July and August 2017, where submersible pumps were replaced but disinfection was not done afterwards.	The operator(s) did the water distribution flushing after finding out about the total coliform positive samples. They also disinfected the well and collected subsequent samples until all samples were clear.
1.2 Was the tap area unsanitary at the time of sampling?	☐	☒	☐		
1.3 Was this sample taken from an outside faucet?	☒	☐	☐		
1.4 Was the sample taken from a swivel tap?	☒	☐	☐		
1.5 Did the tap have a point of use treatment device on it?	☐	☒	☐		
1.6 Does the building where the sample was taken have a point of entry device?	☐	☒	☐		
1.7 Has this location undergone any plumbing replacements or repairs?	☐	☒	☐		
1.8 Are there any possible cross connections around the sample site (including yard hydrants and stock tanks)?	☐	☒	☐		
1.9 Is this location near a storage tank or dead end?	☐	☒	☐		
1.10 Have there been any analytical results or any additional samples collected, including source samples, which were positive (not for compliance)?	☒	☐	☐		
1.11 Prior to this incident, when was the most recent satisfactory coliform samples taken? Date:	7/11/2017				
1.12 Any other sample site issues not previously mentioned?	☐	☒	☐		

REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 2 ASSESSMENT

2.	Review of sample protocol	Y	N	N/A	Indicate Element number being described.	Indicate Element number being described.
2.1	Was the positive sample(s) taken by the operator in responsible charge? Provide name of sampler.	☒	☐	☐		
2.2	Is the sampler a regular, trained sampler?	☒	☐	☐		
2.3	Was a laboratory-provided TC sample bottle used?	☒	☐	☐		
2.4	Was the aerator removed?	☐	☐	☒		
2.5	Was the water tap flushed for at least 5 minutes?	☒	☐	☐		
2.6	Was the tap disinfected or flamed?	☒	☐	☐		
2.7	Did the sample get too warm prior to being placed on ice?	☐	☒	☐		
2.8	Were there other sampler errors? Describe	☐	☒	☐		
2.9	If it is a seasonal system, were there any problems during the most recent start-up procedure?	☐	☒	☐		
2.10	Any other sample protocol issues not previously mentioned (e.g. vandalism or unauthorized access)?	☐	☒	☐		
3.	**Review of the distribution system.**	Y	N	N/A	Indicate Element number being described.	Indicate Element number being described.
3.1	Have any mains or service lines recently been repaired, replaced or installed?	☐	☒	☐	3.5. A backflow prevention device is at the R.V. dump station. 3.7. Hypo chlorination is not being applied continuously.	
3.2	Have fire hydrants or blow offs been recently flushed/used/sheared?	☐	☒	☐		
3.3	Have valves been recently exercised to direct flow?	☐	☒	☐		
3.4	Any leaks or main breaks noted?	☐	☒	☐		
3.5	Are all of the backflow prevention devices operational and maintained?	☒	☐	☐		
3.6	Was there a total loss of pressure, low pressure (<20 psi) or changes in water pressure? If yes, when?	☐	☒	☐		
3.7	Any areas of the distribution with low disinfectant levels (<0.2 mg/L)?	☒	☐	☐		
3.8	Any recent pump station failures or repairs?	☐	☒	☐		
3.9	Air relief valve leaking?	☐	☒	☐		
3.10	Standing water or debris in (air relief) valve vault?	☐	☐	☒		
3.11	Any recent power loss?	☐	☒	☐		
3.12	Any unprotected cross connections (including yard hydrants and stock tanks)?	☐	☒	☐		
3.13	Has high turbidity been detected in the distribution system?	☐	☒	☐		
3.14	Is there evidence of intentional contamination or vandalism?	☐	☒	☐		
3.15	Any other distribution issue not previously mentioned (e.g. other O&M activities that could have introduced coliforms)?	☐	☒	☐		

REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 2 ASSESSMENT

4.	Review of storage tank(s) (Note the specific facility if any issues are found)	Y	N	N/A	Indicate Element number being described.	Indicate Element number being described.
4.1	Is there a presence of animals or insects in the tank(s)?	☐	☐	☒	The Water System does not have a surface storage tank. Only one pressure tank at the site of Well 4 keeps the system pressurized.	
4.2	Are there breaches or holes of any sort into tank(s)?	☐	☐	☒		
4.3	Is there any presence of animal droppings around openings, vents or overflows?	☐	☐	☒		
4.4	Is there sediment buildup and floating debris in tank(s)?	☐	☐	☒		
4.5	Have the tank(s) been cleaned within the last 5 years? If not, list when it was last cleaned.	☐	☐	☒		
4.6	Are the vents and overflows protected against entry from animals, insects or other contaminants?	☐	☐	☒		
4.7	Are the screens damaged or not properly installed?	☐	☐	☒		
4.8	Does the reservoir have a common inlet/outlet?	☐	☐	☒		
4.9	Is the overflow pipe directly connected to a tank drain, sanitary sewer or storm drain?	☐	☐	☒		
4.10	Does the hatch have a solid, water proof, shoebox type lid that is properly sealed?	☐	☐	☒		
4.11	Was the hatch locked or secured?	☐	☐	☒		
4.12	Has the tank been accidently drained?	☐	☐	☒		
4.13	Have there been high flows through the tank?	☐	☐	☒		
4.14	Was there high water age in the tank (infrequent water use)?	☐	☐	☒		
4.15	Was the sample taken when the tank was at the low level mark?	☐	☐	☒		
4.16	Failure or improper operation on tank telemetry/altitude valves/controls?	☐	☐	☒		
4.17	Any recent repairs on the tank(s)?	☐	☐	☒		
4.18	Was there any power loss?	☐	☐	☒		
4.19	Is the site secured (e.g. fencing, locked gates, etc.)?	☐	☐	☒		
4.20	Was the tank vandalized or subject to tampering?	☐	☐	☒		
4.21	Any other storage tank issues not previously mentioned above?	☐	☐	☒		
	Pressure Tanks (if applicable)	**Y**	**N**	**N/A**	**Indicate Element number being described.**	**Indicate Element number being described.**
4.22	What is the volume of the pressure tank? Attach additional sheets if needed.	6000 gallons				
4.23	What is the age of the pressure tank? Attach additional sheets if needed.	Old				
4.24	Does the pressure tank use a bladder and/or air compressor? Attach additional sheets if needed.	Air compressor				
4.25	Did the pressure tank(s) deviate from normal operating pressure?	☐	☒	☐		
4.26	Is the compressor pump running more than normal?	☐	☒	☐		

REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 2 ASSESSMENT

4.27	Is the tank bladder water logged?	☐	☐	☒		
4.28	Is the tank damaged, rusty, leaking or have holes?	☐	☒	☐		
4.29	Was there any recent work performed on the tank?	☐	☒	☐		
4.30	Is the air relief vent (if there one) screened and facing down?	☒	☐	☐		
4.31	Can the inside of the pressure tank be visually inspected through an inspection port? If so, when was it last inspected?	☐	☒	☐		
5.	**Review of treatment process (if applicable)**	**Y**	**N**	**N/A**	**Indicate Element number being described.**	**Indicate Element number being described.**
5.1	Has the treatment been bypassed altogether at any time or have individual processes been interrupted by power outages or other causes? If yes, provide details on when, which processes and for how long?	☐	☐	☒	The Water System does not have any treatment plant. In case of bacteriological contamination, emergency hypochlorination is applied.	
5.2	Have there been any new treatment processes added or new equipment installed?	☐	☐	☒		
5.3	Have there been any recent repairs of major unit processes or treatment equipment?	☐	☐	☒		
5.4	Have there been any changes in the operational procedures used for treating the water such as, changes in chemical dosages, flow changes, or changes in coagulant chemicals used? If yes, provide details of the change and when it occurred.	☐	☐	☒		
5.5	Has a coagulant been added at all times the plant has been filtering water?	☐	☐	☒		
5.6	Have there been changes in raw water quality?	☐	☐	☒		
5.7	Was the settled water turbidity increasing?	☐	☐	☒		
5.8	Was the finished water turbidity increasing?	☐	☐	☒		
5.9	Have filter clogging algae caused more frequent backwashing?	☐	☐	☒		
5.10	Have there been any failures in adding disinfectant for any length of time?	☐	☐	☒		
5.11	Was water delivered that did not meet CT requirements?	☐	☐	☒		
5.12	What is the entry point chlorine residual today? Free/Total?		mg/L			
5.13	Has there been any vandalism or tampering at the plant?	☐	☐	☒		
5.14	Any other treatment plant issues not previously mentioned above?	☐	☐	☒		
6.	**Sources – Well(s)** **(Note the specific facility if any issues are found)**	**Y**	**N**	**N/A**	**Indicate Element number being described.**	**Indicate Element number being described.**
6.1	Is there a 50 foot annular seal?	☒	☐	☐	6.1. The well penetrate hard rock stratum to a depth of 78 ft. The well driller's report is not on file. The well is	
6.2	Is the surface seal defective or damaged or not water tight?	☐	☒	☐		

REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 2 ASSESSMENT

6.3	Is there a casing vent?	☒	☐	☐	about 150 ft from the Kern River.	
6.4	Does the casing and/or air relief vent have a screen to prevent the entry of insects?	☒	☐	☐		
6.5	Does the vent and pump to waste terminate in an air gap of at least three pipe diameters above the ground?	☒	☐	☐		
6.6	How is the well used? (Circle if applicable)		Primary		Backup Emergency	
6.7	Are there any unprotected cross connections at the wellhead?	☐	☒	☐	6.11. Pumps for Well 4 and Well 5 were replaced in July and Aug 2017, respectively. The contractor that replaced the pumps did not disinfect the well casing after completion.	
6.8	Are there any unprotected openings in the pump or pump assembly?	☐	☒	☐		
6.9	Is the pitless adapter damaged?	☐	☐	☒		
6.10	Are there any exposed holes or cracks near the wellhead? For example electric conduit.	☐	☒	☐		
6.11	Has there been any recent work performed on the pump?	☒	☐	☐		
6.12	Is the wellhead secured to prevent unauthorized access?	☒	☐	☐		
6.13	Have there been any sewer spills, source water spills or other disturbances near the well?	☐	☒	☐		
6.14	Is the wellhead at least 18-inches above grade?	☒	☐	☐		
6.15	Is there evidence of standing water near the wellhead?	☐	☒	☐		
6.16	Is the well pit in standing water or evidence of flooding?	☐	☐	☒		
6.17	Any other well issues not previously mentioned above?	☐	☒	☐		
	Sources- Spring(s) **N/A** **(Note the specific facility if any issues are found)**	**Y**	**N**	**N/A**		
6.18	Is there evidence of flooding or infiltration of surface water runoff around the spring?	☐	☐	☐		
6.19	Is the spring box improperly developed or poorly maintained?	☐	☐	☐		
6.20	Is the spring site secured (e.g. locks, fence, gate, etc).	☐	☐	☐		
6.21	Are there dead animals near the spring?	☐	☐	☐		
6.22	Any other issues about springs not previously mentioned above?	☐	☐	☐		
	Sources – Surface Water **N/A**	**Y**	**N**	**N/A**		
6.23	Have there been algae blooms?	☐	☐	☐		
6.24	Has the source water turned over?	☐	☐	☐		
6.25	Have there been any sewer spills, source water spills or other disturbances?	☐	☐	☐		
6.26	Any other source water issues not previously mentioned above?	☐	☐	☐		

REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 2 ASSESSMENT

	Sources-purchased water **N/A**					
6.27	Water quality issues with supplier?	☐	☐	☐		
6.28	Low disinfectant residual from supplier (typically ≤0.2 mg/L)?	☐	☐	☐		
6.29	Any other purchased water issues not previously mentioned above?	☐	☐	☐		
	Applicable to all sources					
6.30	Has an unapproved source been used?	☐	☒	☐		
6.31	Has there been a change in sources?	☐	☒	☐		
6.32	Has there been recent rapid snowmelt, heavy rainfall or flooding?	☐	☒	☐		
6.33	Any evidence of animals near the source?	☐	☒	☐		
6.34	Have there been changes in available source water (e.g. significant drop in water table, reservoir capacity)	☐	☒	☐		
6.35	Is the source water sample for ground water systems E. coli positive? This may indicate that the positive sample is originating from the source and may be a continuous source of contamination.	☐	☒	☐		
6.36	Any other source issues not previously mentioned above?	☐	☒	☐		
7.	**General Operations**				**Indicate Element number being described.**	**Indicate Element number being described.**
7.1	During or soon after bacteriological quality problems, did you receive any complaints of any customers' illness suspected of being waterborne? How many?	☐	☒	☐		
7.2	What were the symptoms of illness if you received complaints about customers being sick? **N/A**					
7.3	Were there any extreme weather/natural events (e.g. heat, freezing, raining, windy, fires, earthquakes etc)	☐	☒	☐		
8.	**Significant Deficiencies**				**Indicate Element number being described.**	**Indicate Element number being described.**
8.1	Are there any unaddressed significant deficiencies? This may indicate that the problem is known and is in the process of being remedied. Include approved corrective action date and status of each corrective action.	☐	☒	☐		

1. Attach additional sheets if needed.

REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 2 ASSESSMENT

Additional Comments:

Name of SWRCB-Division of Drinking Water or LPA representative completing the form (PRINTED): AbdelRahman M Shurbaji, Ph.D., P.E.

Signature: Date: 9/26/2017

Water system responsible party (PRINTED):

Signature: Date: 9-25-17

Reserved for Regulatory Agency (DDW / LPA) Review

	Yes	No	Comments
1. Has assessment been successfully completed?	☒	☐	
2. Likely reason for EC+ occurrence has been found.	☐	☐	N/A
3. System has corrected the problem.	☐	☐	
4. Were all issues identified corrected?	☐	☐	
4. Corrective Action Approved?	☐	☐	